Michel Chevalier: Visionary of Modern Europe?

by Michael Drolet

Leading 19th century statesman, political economist, architect of the 1860 commercial treaty between France and the United Kingdom, and campaigner for peace between European nations, Michel Chevalier had also been a dominant voice in the Romantic socialism of Saint-Simonianism: the eclectic nature of his thought would lend itself to a particular vision of Europe, forerunner of today’s European Union.

In December 1880 a group of French workers completed the first stage of a colossal engineering project near Sangatte. The building of an underground railway tunnel linking France and Britain, the first Channel Tunnel, had begun. First conceived by a French mining engineer Albert Mathieu-Favier in 1802, this great venture found its leading crusaders after the 1830 Revolution. One of them, a young, ambitious and visionary French mining engineer Michel Chevalier (1806-1879) seized on the idea of a channel tunnel to articulate a new economic and political vision for France, Britain, and Europe. Throughout his life Chevalier laboured to make this vision a reality, and in 1875 he founded La compagnie de chemin de fer sous-marin entre la France et l'Angleterre. Investors on both sides of the channel were transported by Chevalier’s vision and poured money into the company. But his and their faith in the project was dashed when the British military successfully lobbied its government to withdraw its support, fearing the tunnel would be used as an invasion route. In 1883 work on the project was stopped. It would take over a century to reverse that decision.
History's Cruel Judgement: the Life of Michel Chevalier

The life and work of Michel Chevalier is not well known today. The two works for which he was justly celebrated in his day were *Le Système de la Méditerranée* (1832) and the *Lettres sur l'Amérique du Nord* (1836), the rival text to Alexis de Tocqueville's *Democracy in America* (1835) and hailed as the great ‘treatise of the civilisation of the peoples of the West’ by Alexander von Humboldt. Today these works attract little attention. Undergraduates do not study them, nor do historians write much about them, unlike *Democracy in America*. Chevalier’s numerous other publications have also been almost completely forgotten, even among specialists of the nineteenth-century. In their day, however, these books and articles shaped nineteenth-century French and European opinion on a range of topics from the theory of political economy to the practicalities of constructing a canal through the Isthmus of Panama to a history of Mexico. This is a curious and sad misfortune. As a prominent member of Napoleon III’s *Conseil d’État*, Chevalier was a powerful voice in shaping the commercial and industrial policies of the Second Empire. He was the mastermind behind the 1860 Commercial treaty between France and Britain, an achievement for which Napoleon III made him a Senator, and Queen Victoria presented him with the gift of a magnificent chandelier, which today hangs proudly in the cathedral of Lodève, the town he called home.

Chevalier’s list of distinctions was equally impressive. He was a member of the Academy of Moral and Political Sciences, professor of political economy at the *Collège de France*, president of many institutions including the *Conseil Général de l’Hérault*, the 1855 Imperial Commission of the Paris Universal Exhibition, and the *Société Française de Statistique Universelle*. As vice-president of the International Association for the Uniformisation of Measures, Weights and Currencies, he was one of main forces behind the international movement for metrification, as well as a prominent participant in the debates leading to the Latin Monetary Union. As a founder member and vice-president of the *Ligue Internationale de la Paix*, he played a leading role until his death in 1879 in trying to foster a new and pacific order for Europe. He was the only French senator to vote against going to war with Prussia in 1870. Chevalier’s internationalist credentials won him admirers throughout Europe. He was hailed in the European press, and bestowed with numerous international titles and awards,

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2 It took over 175 years for a modern edition of this work to be published. Edited by Pierre Musso *Le Système de la Méditerranée* was published by the Éditions Maucius in 2008 under the title *Le Saint-Simonisme, L’Europe et la Méditerranée*.


including membership of the Royal Swedish Academy and honoured with the British Royal Society’s Gold Medal for services to science. In important ways, Chevalier’s internationalism and his ideal of a united and peaceful Europe bound together by tariff-free trade borne and enlarged by a vast integrated infrastructure and telecommunications network make him one of the distant founding fathers of today’s European Union. Such a life has been unkindly treated by history.

Michel Chevalier was born 13 January 1806 into a modest middle-class household in Limoges. He and his siblings benefitted from the transformation of French society brought about by the Revolution and the Empire. They received excellent educations and accomplished much. His four brothers all led noteworthy careers.

Science, Technology and a Holistic Vision of the World

Between 1823-1825 Chevalier studied under France’s leading mathematicians and scientists including Auguste-Louis Cauchy, André-Marie Ampère, François Arago and Louis Gay-Lussac at the École polytechnique. Having graduated fourth in his year group, he then entered the École des Mines studying under a similar galaxy of talents including the famous Brochant de Villiers and his leading disciples Armand Dufrénoy and Élie de Beaumont. Chevalier ‘occupied the highest rank in the classification in the order of merit’ and graduated in 1828. After writing a number of important articles, he was nominated candidate engineer (aspirant) in the spring of 1829, and made engineer second-class in July 1830. His first posting was to the rich coal mining regions around Valencienne.

Chevalier’s education at both the École Polytechnique and the École des Mines proved decisive to his later work, particularly in political economy. Many of those who taught him, including Arago, Gay-Lussac, Dufrénoy and Beaumont were close collaborators and friends of the famous German scientist and explorer Alexander von Humboldt. Like Humboldt they shared an understanding of nature and society as intimately interconnected and mutually impacting. This new scientific approach rested on philosophical foundations that had diverse sources. But it was the impact of a particular type of German Naturphilosophie – one which owed much to the reflections of Goethe and Friedrich Schelling – that was of great importance. The holistic world-view that emerged from this new way of doing science, one that aimed for a reconciliation of the subjective world of the individual and the objective world of nature, marked Chevalier’s reflections on some of the critical issues of his day, including the relationship between deforestation and climate change. It also shaped his

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6 This was an important topic in the nineteenth-century and led to the creation of an important scientific commission of the Academy of Sciences to investigate it. Chevalier treats the question of deforestation and
thoughts on political economy, especially his perspective on the unleashing of nature’s and humanity’s potential, the central place he assigned to productive forces, networks and the organisation of material interests. These preoccupations diverged from orthodox economic thinking at the time. 7

**Romantic Socialism and the Système de la Méditerranée: A Template for the Future**

This new way of doing science also made him receptive to the message of the romantic socialism of the Saint-Simonians. 8 Their ideas on the rational organisation of economy and society, the unleashing of the productive forces of humanity and nature, and their desire to reconcile classes, sexes, and peoples, all resonated with the holism of this scientific worldview. Chevalier first became exposed to Saint-Simonian ideas a year after entering the École des Mines. He read their newspaper *Le Producteur* and took a particular interest in articles on political economy. But it wasn’t until August 1830 that he finally joined the Saint-Simonians. Once he joined the movement his rise within it was meteoric. Within a matter of weeks, he was writing articles for *Le Producteur*. He then became editor-in-chief of *Le Globe* after it came under Saint-Simonian control. 9 Under his zealous editorship he made the newspaper truly Saint-Simonian giving it the title *Journal de la doctrine de Saint-Simon* and a powerful voice to Saint-Simonian ideas by writing most of its articles. He fulfilled this role so well that he soon became Enfantin’s chief lieutenant, and was made, in the cult’s bizarre theological hierarchy, Cardinal de l’église de l’industrie. It was during this time that Chevalier wrote the famous articles that would serve as the template for much of his later economic and political thinking: *Le Système de la Méditerranée*.

*Le Système de la Méditerranée* was amongst Chevalier’s most visionary works. Now widely conceived of as a work in its own right, *Le Système de la Méditerranée* was in fact a climate change in a number of mining reports and later works. See *Mémoire sur le Gisement et l’exploitation du Fer Spathique dans la vallée de Baigorry* (1827) and *Mémoire sur l’Affinage du Fer dans la Vallée de Vicedos* (1827). École Nationale Supérieure des Mines de Paris Ms. M 1827 (54) & Ms. M 1827 (65); M. Chevalier, *Des mines d’argent et d’or du nouveau-monde*, Paris, 1846.


collection of fourteen articles under the single title *Religion Saint-Simonienne: Politique industrielle et Système de la Méditerranée*. Five of these articles dealt with internal matters to France and were written by Chevalier’s Saint-Simonian comrades Stephane Flachat (1800-1884), Henri Fournel (1799-1876), and Charles Duveryier (1803-1866). These articles argued that France’s economic prospects and the cause of social justice would be best served by diverting state funds away from wasteful military expenditures and toward beneficial public works. The nine articles that Chevalier wrote, particularly the fourth, which outlined the Mediterranean System, radically altered the prosaic Saint-Simonian theme of public works. Chevalier seized on French fascination with the Mediterranean to present a fresh vision of the Mediterranean basin as a new civilisational space. As he put it:

The Mediterranean was an arena, a closed field, where for over thirty centuries the East and the West have been locked in combat. Henceforth the Mediterranean must become a vast forum where at all points the peoples who, until now have been divided, will commune. The Mediterranean will become the matrimonial bed of the East and the West.10

What Chevalier proposed appeared nothing less than the economic, political, and cultural integration of the European and the Ottoman worlds. This hinged on an imaginative system, which comprised a complex infrastructure network of railways, rivers, canals, roads, and shipping routes linking the port cities of the Mediterranean to each other and to the major capitals of Europe. The colossal infrastructure network that he envisaged involved over 60,000km of railways that would link the cities of northern Europe to North Africa and the cities of Western Europe to the Middle East and furthest eastern regions of the Russian empire. The Mediterranean System, Chevalier believed, would revolutionise the distance and speed of travel for individuals and goods. The potential benefits were enormous. First, this transportation and telecommunications revolution would increase significantly the economic capacity of the nations within the system. Countries that languished over the decades, including Spain and Portugal, would be injected with new economic vigour. The system, which he likened to a natural organism, would bring about the internal regeneration of these nations: ‘like a system of veins and arteries through which civilisation circulated, awakening weary nations by bringing together disjointed limbs and causing them to move from a state of torpor to one of intoxicating activity’.11 This increased economic vigour and capacity would, in turn, generate more trade, thereby further increasing economic activity and capacity. This virtuous cycle translated directly into improving the material conditions of the poorest in society – another favourite Saint-Simonian theme. With the development of the poorest’s material conditions ignorance and prejudice would be eliminated. The ensuing trade and human contact would forge new and strong bonds between the divided peoples of Europe, and between Europeans and non-Europeans. It would free individuals from insular

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mentalities and parochial mind-sets and ‘guide a course for all spontaneities […] give expression to and normalise characteristics and idiosyncrasies that when restrained or suppressed shatter or splinter into division.’ It would ‘cause to flourish each individuality, race, people, class or man…in teaching it to rely on others and to aid others in being allied to others.’

It would forge a cosmopolitan outlook and inclusive union. Chevalier carefully thought about how the System could advance, and broaden, the Saint-Simonian ideal of capacity. He took to new heights the Saint-Simonians’ re-casting of what had been a central liberal concept in debates about citizenship, the idea of le citoyen capacitaire. His scientific education and its partial underpinnings in German Naturphilosophie were critical to this. For Chevalier and the Saint-Simonians capacity went beyond the mere fulfillment of civic virtues and duties, it encompassed the unleashing of what appeared to be limitless human and natural potentialities. The union between the objective world of nature and the subjective nature of man, the synergy between man and nature, the goal of Naturphilosophie, was taken to a new level and was expressed in many forms, including a number of surrealist poems by Chevalier.

In the Système de la Méditerranée Chevalier extended the idea of capacity beyond the political to the economic and cultural spheres. He argued that the System would result in the rapid development of economic capacity, which in turn enriched the moral and intellectual capacities of individuals and peoples. This was the System’s inherent uplifting and democratising power. And like the prophets of today’s ‘World-Wide Web’ who see the Internet as democratising and socially transformative, Chevalier thought the same of infrastructure and telecommunications networks that made up his System. As he declared in his Lettres sur l’Amérique du Nord: ‘improving communications is working for real liberty, positive and practical… it is making equality and democracy. The perfection of the means of transport not only reduces the distance between one point and another but also between one class and another.’

But this faith in the democratising power of the Mediterranean System disguised a deep and insoluble problem that lay in a fundamental contradiction with capacity itself. Whilst capacity represented the unleashing of human potential and therefore held out the promise of the development of each person’s potentiality, those very potentialities were understood to be unique and not equal. The Saint-Simonian obsession with capacity was in fact bound up with meritocracy and not equality, and it was one of the reasons why Saint-Simon embraced this liberal concept and ideal in the first decades of the nineteenth-century. Not only was the concept instrumental to the struggle against the ancien régime aristocracy, which valued privilege over merit, but it could also justify the exclusion of the popular classes from the franchise, and check the danger inherent to democracy of majority tyranny. The Saint-Simonian slogan ‘à chacun selon ses capacités, à chaque capacité selon ses œuvres’ held

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12 Ibid., 122.


out the promise of individual advancement, but in so doing it represented a regressive step – and fatal flaw for Saint-Simonian socialism – in the struggle for equality precisely because the development of capacities was at bottom more the responsibility of the individual, the obligation of the ego, and less that of society, even if the Saint-Simonians tried to gloss over that lacuna by repeatedly stressing the need for public works. The deployment of the concept absolved France’s new élites from undertaking real, and substantive, social transformation.

America: the Model for France and Europe

Within a very short time after the publication of Le Système de la Méditerranée, Louis Philippe’s government brought charges against Chevalier and other prominent Saint-Simonians, including the movement’s leader Prospère Enfantin, for offences against public morality. The Saint-Simonians’ views on marriage and free love were an affront to respectable opinion, as were letters Enfantin sent to the French monarch’s wife, Queen Maria-Amelia. The trial that ensued at the end of August 1832 was a sensation and widely reported in the press. Chevalier and Enfantin were found guilty and sentenced to a year in the political prison of Sainte-Pélagie. It was during this time that relations between Enfantin and Chevalier deteriorated. In May 1833 Chevalier broke off all ties with Enfantin and the Saint-Simonian movement. This act, along with poor health and lobbying by his professors at the École polytechnique and the École des Mines, led to Chevalier’s early release in June. Once freed, he was reintegrated into the corps des mines, and given his old rank of mining engineer second-class. Three months later he was authorised to undertake an investigation of mining, industry, and infrastructure in the United States. The mission represented an opportunity for rehabilitation. It also coincided with the dispersal of the Saint-Simonians, which saw many of its leading members being allowed to travel to Egypt, and Enfantin after his release from jail, being permitted to join them.16 This all came as a welcome relief to Louis-Philippe’s government, which saw the movement’s popularity, and hand in uprisings in Lyon and Paris, as dangerous to public order.

Chevalier’s mission to the United States lasted from 1 October 1833 until 23 November 1835. The book that ensued in 1836, Lettres sur l’Amérique du Nord, first appeared as a series of thirty-nine wide-ranging and arresting articles published between November 1833 and October 1835 in the official Le Journal des Débats. Tocqueville’s publisher, André Gosselin, saw a lucrative opportunity in assembling in a single volume articles that bridged the worlds of science and engineering with those of economics, politics, history, and sociology. The American canvas painted by Chevalier was very different from that painted by Tocqueville. Whereas Tocqueville wrote one of the most profound philosophico-political treatises on the nature and form of modern democracy, Chevalier’s Lettres tackled altogether

different questions, many of which were immediately pertinent to 1830s France, including those relating to public credit, railway, canal, and road construction. The book examined the state of American manufacturing, working conditions, wages, and the material conditions – including modern conveniences – of the working classes. It not only gave the clearest possible snapshot of the American economy and polity, it also showed how the American economy could serve as a model for France. The work was a great success and proved highly influential.

The Lettres expounded and expanded on Chevalier’s famous Le Système de la Méditerranée. Whereas Le Système presented an ideal of the Levant, North Africa and Europe being joined through a network of railways, shipping routes, and canals, with France at the centre of a community of European nations, the Lettres presented America as a concrete example of that ideal. Chevalier showed how America’s large Northern cities were linked through a network of railways and canals with those in the South, while its Eastern cities, New York, Boston, Baltimore were connected to the western frontier. The transformative power of this integrated infrastructure network on America’s economic, social, and political life was profound, and it was what lent America its particular peaceful and stable democratic character. Chevalier reflected at length on America as a salutary example of the positive connection between an integrated infrastructure, economic growth, and political stability.

The Transformation of Political Economy and the Reorganisation of European Society

Two other important and very similar works followed the publication of Lettres sur l’Amérique du Nord, and André Gosselin published both. These were Des intérêts matériels en France: travaux publics, routes, canaux, chemins de fer (1837) and Histoire et description des voies de communication aux Etats-Unis et travaux d’art qui en dépendent (1840). Both made what had been the Saint-Simonian case for large-scale public works projects, but presented that case in the altogether more authoritative, and altogether less contentious, language of liberalism. But this use of the language of liberalism would alter the nature of liberalism itself. Chevalier focused on how the development of infrastructure accelerated the growth of trade, national wealth, and the material conditions of all classes in society, but particularly the working classes. He understood that the intellectual distance between Saint-Simon and liberal political economists such as Jean-Baptiste Say was not great, with both believing that internal and foreign trade were critical to a nation’s economic fortunes, and growth of its economic capacity. Chevalier therefore argued that only through significant State support and intervention could France’s infrastructure be developed sufficiently to facilitate the levels of trade that would be truly economically and socially transformative, lending stability to democracy. His mid-nineteenth-century vision for France was over a century ahead of its time, combining, as it did, Keynesianism before Keynes with late 20th and early 21st century globalism before the era of globalisation.
The impact of Chevalier’s works was significant. They attracted the attention of political economists and public officials alike. Many were convinced by his prescription for the French economy, and it was not long before his name was put forward to succeed Pelegrino Rossi as professor of political economy at the Collège de France. In 1840 he succeeded Rossi in that role and, with the exception of a brief interlude after the 1848 revolution, held that chair until his death in 1879. Throughout his time as professor of political economy Chevalier stressed the important Saint-Simonian themes of his previous works. In his 1841 inaugural lecture he defined political economy as ‘the science of material interests […] concerned with how these interests are formed, how they develop, and how they become organised.’ The focus on the organisation of material interests was very unusual for liberal political economy of this time. The writings of typical liberal political economists, such as Jean-Baptiste Say, Charles Comte, Charles Dunoyer, Joseph Garnier, or Frédéric Bastiat, said little about organisation. But organisation was central to Chevalier’s thinking. This was because of the way in which he combined a natural scientific world-view that owed so much to his engineering education with Saint-Simonian concerns. The result yielded an odd and seemingly contradictory outcome: a rejection of unregulated competition on one hand and an endorsement of national and international trade on the other. Chevalier’s participation in the Association pour la liberté des échanges and his promotion of commercial treaties, such as the one he negotiated with the British in 1860, seemingly stood at odds with his critique of unregulated competition. This apparent and ostensibly important contradiction was, in his mind, no contradiction at all. This was because at bottom he never viewed competition and trade through the liberal prism of politics, which understood both as the expression of individual liberty, the absence of constraint on the individual’s will. Rather, he viewed competition and trade through a scientific prism informed by a sophisticated understanding of the laws of nature and the generative capacity of natural systems. Competition and trade were seen as a form of circulus that acted as a catalyst to innovation. They were therefore not expressions of individual liberty but rather part of a higher and more encompassing idea of organisation.

This distinctive view of competition and trade was outlined in Chevalier’s first lectures to the Collège de France. In those lectures he described unfettered competition as disaggregating and destructive to economic, political, and social organisation. It pitted industrialists against each other and against their employees; it caused individuals to be alienated from their labours, and impoverished the labouring classes morally, intellectually, and culturally. But unfettered markets weren’t just a threat to the working classes. They threatened to arrest the development of the wider economy by disrupting the circulus through the concentration of capital in the hands of a few wealthy producers. This new and dangerous ‘industrial feudal’ class threatened the catalyst of innovation: small- and medium-size producers. Unfettered markets led to a concentration of capital and power that in turn was a

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brake on innovation. According to Chevalier this represented a squandering of human potential, a net loss for the national economy, and the fragmentation of social organisation.\(^{18}\)

By taking nature – which he understood as a complex circulatory organisation, whose vitality and coherency could be positively or negatively affected by human activity – as the model for political economy, Chevalier was bound logically to stress organisation as the key to economic growth, and unrestricted competition with its resulting disorganisation as the cause of economic depression:

Unlimited competition often causes an excessive fall in prices that appears favourable to the consumer. What occurs after all of these accidents, these extreme depressions, these jolts and these shocks, is not only a transfer of wealth to some and a loss to others; it is rather, in the greater number of cases, a dead loss. For the theorem of kinetic energies that mathematicians establish in relation to the movement of solid objects, equally subsists in the order of material interests, and perhaps too in the ethical realm. In political economy, just as in rational mechanics (la mécanique rationnelle), it is true to say that variations subsist and that shocks result in an enormous loss of energy (une énorme déperdition de force).\(^{19}\)

Taking the laws of nature and the generative capacity of natural systems as the model for political economy meant that the very idea of trade became transformed. The nature of trade itself was fundamentally transformed through its organisation and regulation. No longer conceived of as a form of competition than as a form of circulus, trade acted as a catalyst to innovation and growth. Chevalier revived the physiocratic analogy between the human body and the body of the nation, where trade – the circulation of goods, capital and services – like the circulation of blood in the human body, sustained life and supported vigour, and thus achieved a number of political ends. First, commerce brought together disparate elements, forged common interests, or, as he said, ‘creating everywhere mutual interests’, and so achieved the harmonisation of social interests, or in the Saint-Simonian language he continued to employ: ‘universal association’. These interests combined to generate growth and new interests, and these in turn combined to generate additional growth and interests. The circulatory system multiplied interests, and connections. As a result, it did not just increase economic and human wealth, it increased individuals’ and nations’ productive ‘capacity’. When Chevalier discussed at length all forms of infrastructure networks, from the physical networks of roads, canals, and railways, to the networks of financial capital that stimulated investment, to the knowledge networks – both domestic and international – of science and technology,\(^{20}\) he showed how they fuelled the growth of ‘productive forces’ and associative connections that made up the ‘capacity’ of individuals, classes, and nations. And whilst Chevalier saw capacity as integral to the ‘spirit of association’ and ‘human fraternity’, its

\(^{18}\) *Cours d'économie politique fait au collège de France*, I, 17-18.

\(^{19}\) Ibid., 22.

\(^{20}\) *Cours*, 125-197.
fundamentally inegalitarian nature also justified his endorsement of a technocratic élite and, ultimately, his support for Louis-Napoléon's coup d'état of 2 December 1851.

The Irony of Capacity: Civilisation and Class

Capacity also served another function, which was disguised in *Le Système de la Méditerranée*, but appeared in later works and in connection with his understanding of the history of civilisation. Capacity served as the justification of imperialism. This he made clear in his 1854 *L'Isthme de Panama*. The principle he set out was that a people who failed to make productive use of their resources, to develop their economic capacity, forfeited the right to those same resources.

Hence, if in private matters property implies the right to misemploy or neglect, it does not follow that this is the case in matters of civilisation. Here reigns a divine law, the law of confiscation against those states that do not know how to make use of the talent that God has bestowed upon them, or those who use those talents in a manner contrary to the most elevated and invincible principles of civilisation, such as the bringing together of continents and races.21

The great irony was that whereas Chevalier condemned war and military spending as destructive to the development of economic and human capacity, he justified war with non-European peoples as a precondition to the development of those very same capacities. It seemed that there was a narrowly prescribed and culturally specific way to define capacity, which justified the conquest of foreign lands as a ‘civilising mission’ – such as his support for the 1862 French invasion of Mexico.

But the irony did not just end there. Whilst Chevalier always claimed that one of the key objectives of the economy was to improve the material conditions of the working-classes, at the same time his repeated allusions to capacity entailed a paternalism about how they should lead their lives, and this would serve to justify his support for the coup d'état against the Second Republic and his fervent participation in Napoleon III's *Conseil d'État*.

The final irony of Chevalier’s work was that whilst he reflected at length on trade, infrastructure, networks, and the development of productive forces, all central to his vision for an interconnected and integrated Europe – a forerunner to today’s European Union – the central place he assigned to the concept of capacity within his reflections meant that he could never achieve the fully interconnected and integrated Europe he so keenly desired. This was because the definitional logic of the concept of capacity acted to marginalise those who were never part of the élite who used the term. Whereas the concept of capacity served a useful

ideological function for liberals and romantic socialists in marginalising the *ancien régime* aristocracy at the end of the eighteenth century and into the first decades of the nineteenth century, it erected an insurmountable attitudinal barrier between bourgeoisie and proletariat that no number of railways, canals, or telegraphs could bridge.
Further Reading: